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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,913	08/31/2001	Fred E. Barnes	005950-556	8128

7590

07/31/2003

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EXAMINER

TOOMER, CEPHIA D

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 07/31/2003

16

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/942,913

Applicant(s)

BARNES ET AL.

Examiner

Cephia D. Toomer

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 21 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 26-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-20 and 26-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 15.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This Office action is in response to the amendment filed April 21, 2003 in which claims 21-25 were canceled and claims 1, 6 and 16 were amended.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-20 and 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO9822556 in view of Henderson (US 6,238,446).

WO teaches an unleaded aviation fuel composition having a MON of at least 98 wherein the fuel comprises triptane and/or 2,3,3-trimethyl pentane (see page 2, lines 13-29). Since light alkylates are disclosed in the instant specification as a mixture of C₆ to C₉ isoparaffins with trimethyl pentanes being the major product of alkylation, triptane and 2,3,3-trimethylpentane are considered as light alkylates. The fuel composition also contains a component (a) that is at least one saturated aliphatic liquid hydrocarbon containing 4 to 10 carbon atoms. Examples of component (b) include iso-pentane, iso-octane and a mixture of these two components. WO teaches that the ratio of triptane and/or 2,2,3-trimethylpentane to iso-pentane to iso-octane is 10-80: 5-25: 10: 80. WO teaches that the composition may comprise up to 30 vol. % of an aromatic liquid

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hydrocarbon, such as toluene (see page 4, lines 7-17, 27-35; page 5, lines 1-6, 10-13, 21-24; Examples 1).

WO fails to teach that the gasoline composition of his invention contains greater than 0 ml of tetraethyl lead/gallon of gasoline. However, a prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. *Titanium Metals Corp of America v. Banner*, 227 USPQ 773 (Fed. Cu 1985). The language greater than 0 reads on lead as an impurity or on such amount that is negligible. Henderson teaches this at col. 4, lines 28-33.

Applicant argues that the presence of lead in the aviation fuel of WO'556 would change the fuel and render it unsatisfactory for its intended purpose. Applicant argues that the examiner's statement "reading on impurities and negligible amounts as well as being close enough to 0 that the skilled artisan would expect that the present gasoline and unleaded gasoline would have the same properties", does not form a proper basis for the rejection of the claims.

Henderson teaches that the examiner's statement is proper because Henderson teaches an unleaded aviation gasoline similar to that of WO '556 and Henderson teaches that the fuels of his invention are unleaded in the sense that a lead-containing antiknock agent is not deliberately added to the gasoline. However, he goes on to further state that trace amounts of lead due to contamination of equipment or like circumstances are present in unleaded aviation gasoline.

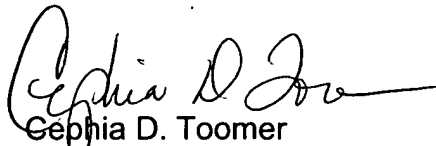
Applicant argues that triptane and 2,2,3-trimethylpentane are not components of a light alkylate but are merely "individual chemical components having similar (or same) number of carbon atoms.

WO '556 teaches at page 3 that 2,2,3-trimethylpentane is an alkylation product of a C₄ fraction containing olefin and hydrocarbon (see page 3, lines 18-24).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 703-308-2509. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Cephia D. Toomer
Primary Examiner
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